

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Office of Fire and Aviation  
3833 South Development Avenue  
Boise, Idaho 83705

**March 8, 2001**

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Instruction Memorandum No. OF&A 2001-009  
Expires: 09/30/2002

To: All Field Offices

From: Director, Office of Fire and Aviation

Subject: Transporting and Dispensing Gasoline, Diesel, and Drip Torch Fuel Used with Terratorches, Helitorches, and Drip Torches

This Instruction Memorandum reinforces IM No. OF&A 2000-021 and revises the time frames for required actions related to continued use of existing equipment and a study to evaluate equipment.

**Program Area:** This Instruction Memorandum provides direction on transporting and dispensing gasoline, diesel, and drip torch fuel used with terratorches, helitorches and drip torches.

**Purpose:** The intent of this IM is to:

1. Clarify that existing terratorch, helitorch, batch mixers, and drip torch fuel transportation equipment can continue to be used except as prohibited by this IM.
2. Remind fire crews of the need to review and re-emphasize the safety and transportation issues identified in IM OF&A 2000-021.
3. Inform the field of the study of ground and aerial ignition equipment that will begin in April 2001.

**Timeframe:** Field Office ground and aerial ignition crews shall implement this direction immediately.

**Budget Impact:** Purchase and installation of UL-listed pumps and hoses for dispensing of any fuel. UL-listed 12 volt electric pump and hose range from \$225.00 to \$350.00. UL-listed hand pump and hose, approximately \$200.00.

**Background:** IM OF&A 2000-021 described several safety and transport issues related to the operation and transportation of ground and aerial ignition equipment, including but not limited to terratorches, helitorches, batch mixers, and drip torch fuel tanks. OSHA's Salt Lake City Technical Center was to have performed air monitoring during last fall's prescribed burning operation to determine if fire crews are overexposed to gasoline and/or dust during those operations, but the monitoring was not performed because prescribed burns were not scheduled.

OSHA did inspect ground and aerial ignition equipment at the Ely Field Office. As a result of this inspection and OSHA's recommendations, NIFC and the Forest Service have agreed to fund a study of terratorches, helitorches, batch mixers, and drip torch fuel tanks. The study will evaluate the operation, maintenance, and transportation of this equipment and make recommendations on how to make the use of that equipment fully compliant with OSHA, DOT, and EPA regulations.

The results of the study should be available by the end of the fiscal year 2001. New policy and guidance will be issued if appropriate when the study is completed. The results of the study will be made available to all State Fire Management Officers and other wildland fire fighting agencies.

**Required Actions:**

1. Field Office ground and aerial ignition crews shall implement the following prior to the use of existing equipment:
  - a. Purchase and install UL-listed pumps and hoses for dispensing of any fuel.
  - b. Instruct fire personnel on the grounding and bonding procedures outlined in IM OF&A 2000-021 and purchase any necessary grounding or bonding leads and rods.
  - c. Instruct fire crews on the procedures outlined in IM OF&A 2000-021 that must be followed so that existing terratorches, helitorches, and batch mixers are operated and transported in compliance with applicable DOT, OSHA, and EPA regulations. (See Attachment 1, Empty Packaging Regulations (1-3) and Continued Use of Existing Terratorches, Helitorches, and Batch Mixers (1-4).)
  - d. Discontinue use of all trailer mounted drip torch tanks.
  - e. Prohibit use of comfort masks when mixing gelled gasoline due to their minimal filtering capability.
  - f. Confer with the State Office Safety Manager prior to the use of any respirator to determine if implementation of a respirator protection program is necessary. This includes the voluntary wearing of dust masks in environments that do not exceed the Permissible Exposure Limit (PEL) for dust.
  - g. Provide employees (NIOSH) approved dust masks for fire crews use in those work environments that do not exceed OSHA PEL's for benzene or dust.

2. Temporarily suspend the purchase of new or retrofitted terratorches, helitorches, and batch mixers (unless approved by the SFMO) until the study of this equipment is completed and new guidance is issued by the Office of Fire and Aviation.
3. Temporarily suspend the purchase of new tanks for the transportation of drip torch fuel (unless approved by the SFMO) until the Bureau and other land management agencies have made a determination as to the best type of tank and new guidance is issued by the Office of Fire and Aviation.
4. Until the Office of Fire and Aviation issues new policy and guidance, continue to use existing terratorches, helitorches, batch mixers, and drip torch fuel tanks in accordance with the provisions identified in IM OF&A 2000-021 and this IM, however the following types of drums and tanks cannot be used:
  - a. Drums used to transport drip torch fuel that are not marked "UN 1A1".
  - b. UN 1A1 drums that have evidence of bulging, have dents deeper than ½ inch, or more than 1 inch long, or have any defects that make the structural integrity of the drum questionable.
  - c. Tanks with piping that allow drip torch fuel to be dispensed from the bottom of the tank, and
  - d. Drip torch fuel tanks mounted on trailers regardless of how the fuel is dispensed.

**Manual/Handbook Sections Affected:** Terratorch Operations Guide, 1986

**Coordination:** This memorandum has been coordinated with BLM's CASHE Program Lead.

**Contact:** Please contact Rick Jensen, Office of Fire and Aviation, at 208-387-5710 or Ken Morin, CASHE Program Lead, at 303-236-6418 if you have any questions.

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